

Massachusetts' Fight Against Childhood Lead Poisoning: Updated Trends, 1993-1998

Massachusetts Department of Public Health
Childhood Lead Poisoning Prevention Program

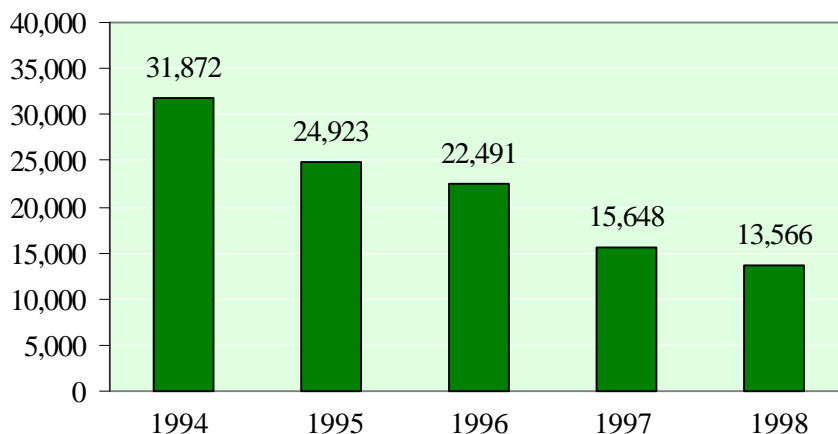
March 1999



What is Lead Poisoning and How Does It Hurt Children?

- Lead is an extremely toxic metal, and young children are most at risk from its effects. The U.S. Environmental Protection Agency calls lead one of the most pervasive developmental toxic substances in the U.S. today. We all have some background level of lead in our bodies, but the higher the level of lead in the body, and the longer it remains high, the greater the risk of lead poisoning and its harmful effects.
- The U.S. Centers for Disease Control and Prevention (CDC) calls childhood lead poisoning a major preventable environmental disease in the United States. It can cause serious, permanent damage to a child's brain, kidneys, bones, nervous system and red blood cells.
- Damage to a young child's developing organ systems can carry lifelong consequences. For example, children who are lead poisoned have a much greater risk of not completing high school, due to permanent, disabling damage to the brain as it was developing. Exposure to lead in childhood has been associated with increased risk of high blood pressure in adulthood, due to permanent injury to the kidneys.
- Studies have shown that even at blood lead levels of 10 micrograms per deciliter (mcg/dL) -- what CDC calls a *childhood lead exposure of concern*, which is well below the Massachusetts legal definition of lead poisoning, at 25 mcg/dL -- lead in children's bodies can slow normal growth and development and cause loss of intelligence, learning disabilities, hyperactivity, aggression and school failure.

**Total Number of Children Tested with Blood Lead Levels
10 mcg/dL or Above
Ages 6 months to 6 years**

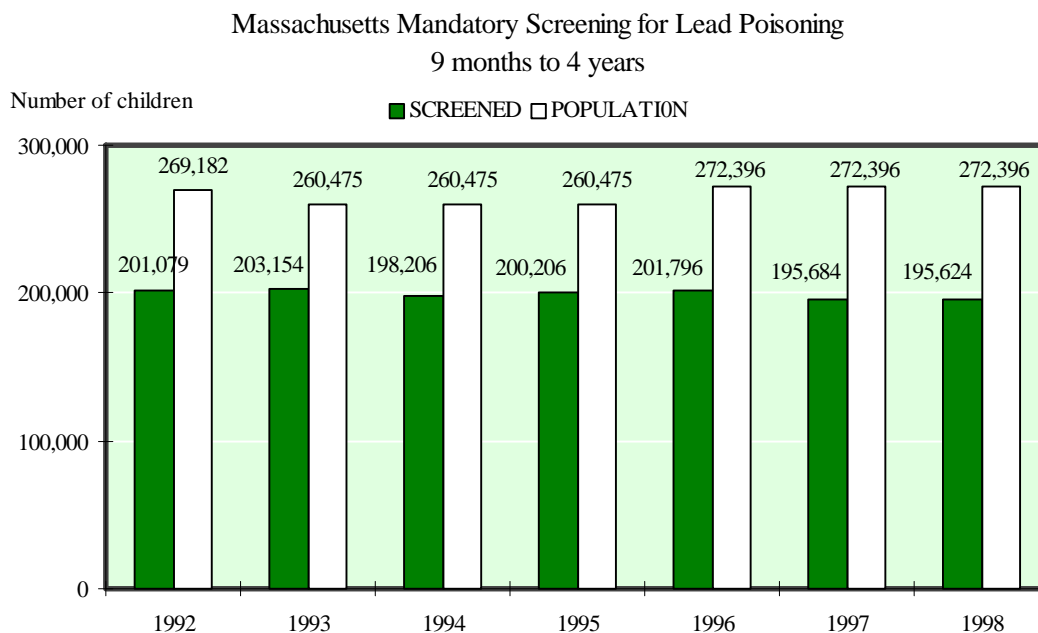


*13,566
Massachusetts
children had
blood lead levels
of 10 mcg/dL
or higher
in FY1998.*

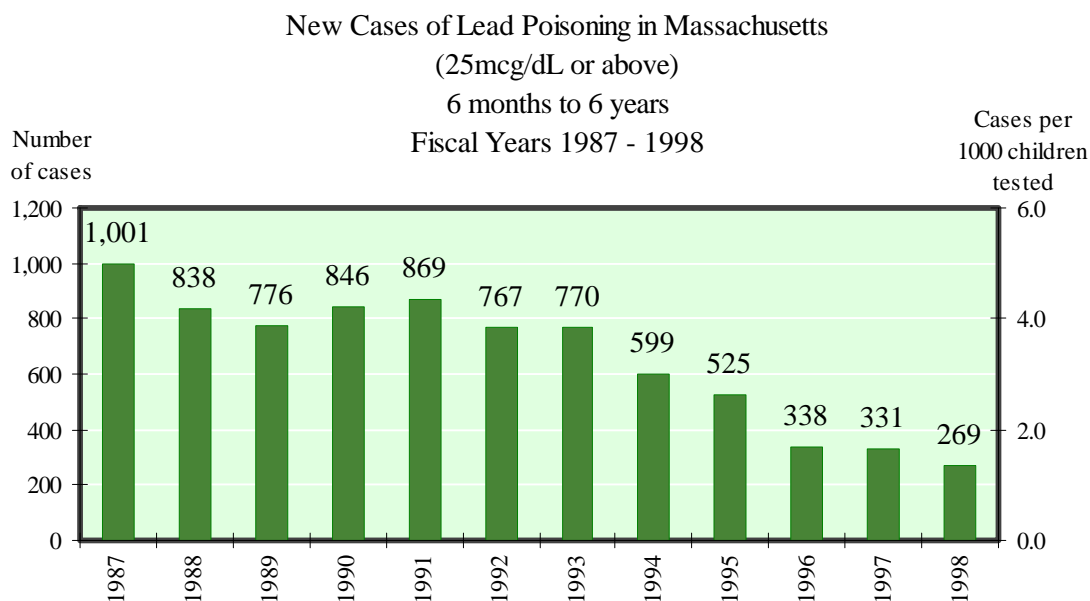
- The single most important source of childhood lead poisoning in the U.S. is lead paint in older housing, according to the CDC. That is certainly true in Massachusetts, where the director of the largest lead poisoning treatment clinic in the commonwealth states that over 90 percent of the thousands of children he has treated were lead poisoned by lead paint in their homes. The older the house, the more likely it is to contain lead paint, and the higher the lead concentration is likely to be. By any measure, Massachusetts has a very old housing stock.

Fighting Childhood Lead Poisoning in Massachusetts: What We've Achieved

Massachusetts has the highest screening rates of any state in the nation. These rates have remained stable over the past several years.

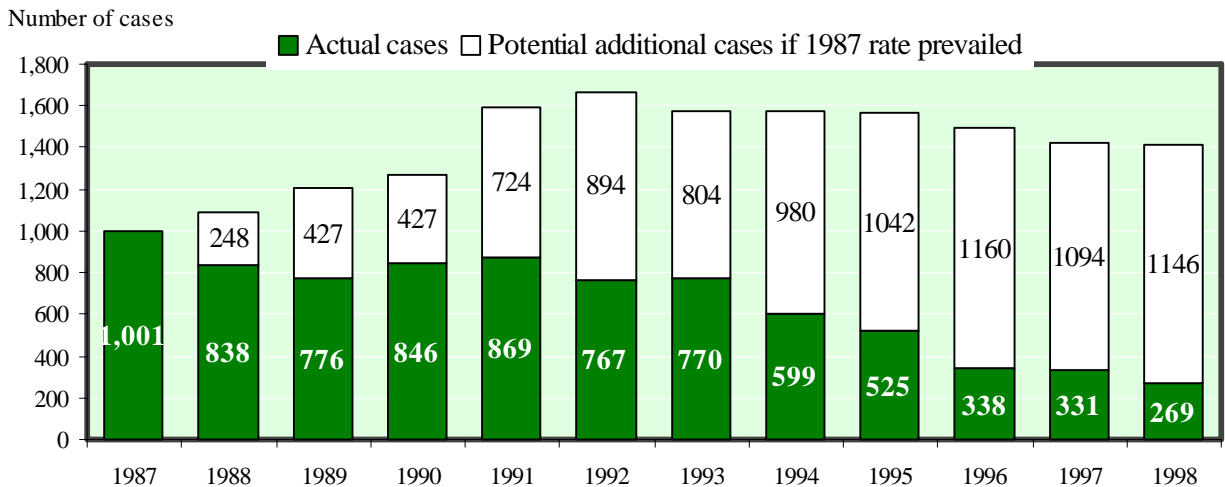


The number of new cases of lead poisoning continues to decline.



If the 1987 incidence rate of 5.5 cases per thousand children tested had remained constant from 1987 to 1998, Massachusetts would have had 9,000 additional cases over this period.

Benefits of Reducing Lead Poisoning Incidence Rate
Massachusetts Fiscal Years 1987 - 1998
(25mcg/dL or above)



When compared with states also having an older housing stock and statewide childhood lead poisoning prevention programs, Massachusetts has significantly higher screening rates and a lower percentage of children with elevated blood lead levels.

Children ages 6 months to 6 years

	Massachusetts	Wisconsin	Maryland
	FY97	FY97	CY97
Percent of children screened	58%	16%	17%
Blood lead \geq 10 mcg/dL	6.4%	10.1%	11.6%
Blood lead \geq 20 mcg/dL	0.6%	1.5%	2.2%

Children ages 6 months to 4 years

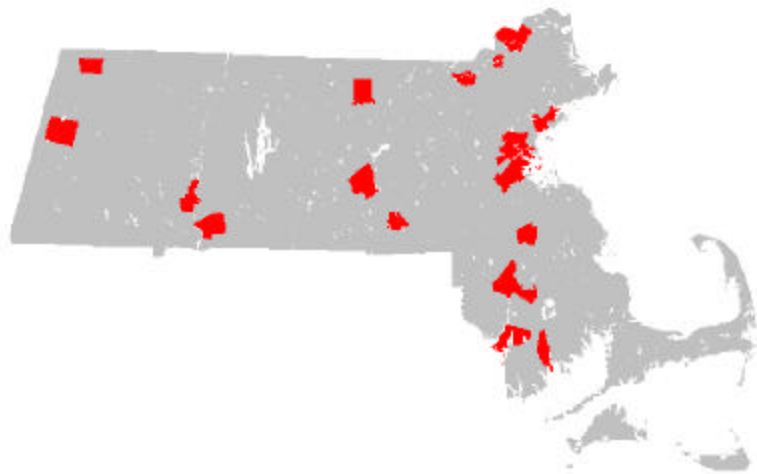
	Massachusetts	Rhode Island
	FY98	FY98
Percent of children screened	65%	56%
Blood lead \geq 10 mcg/dL	5.6%	11.5%
Blood lead \geq 20 mcg/dL	0.6%	1.9%

Fighting Childhood Lead Poisoning in Massachusetts: Why There's More Work to be Done

- Homes built before 1950 are the primary source of lead poisoning among children.
- With 47% of its housing built before 1950, Massachusetts ranks second in the nation for old housing. In the U.S. as a whole, 27% of the housing is this old.
- With 51% of its rental housing built before 1950, Massachusetts is first among the states for old, tenant-occupied housing. In the U.S. as a whole, 28% of rental housing was built before 1950.

Massachusetts' Communities at Highest Risk for Childhood Lead Poisoning FY1993 - FY1997

- | | |
|----------------|----------------|
| 1. Lawrence | 13. Lowell |
| 2. New Bedford | 14. Fitchburg |
| 3. Boston | 15. Fall River |
| 4. Northbridge | 16. Everett |
| 5. Springfield | 17. Medford |
| 6. Holyoke | 18. Chelsea |
| 7. Brockton | 19. Cambridge |
| 8. Worcester | 20. Malden |
| 9. North Adams | 21. Taunton |
| 10. Haverhill | 22. Salem |
| 11. Somerville | 23. Pittsfield |
| 12. Lynn | |



- In the cities and towns in Massachusetts at highest risk for childhood lead poisoning, 63% of the housing was built before 1950.
- One-third of Massachusetts children under the age of six live in the cities and towns at highest risk for childhood lead poisoning
- All of Massachusetts' old homes will only continue to get older, and lead painted surfaces will naturally deteriorate or generate lead dust from normal wear and tear. These old homes will also need maintenance and renovation to continue to house families.
- Up to a third of all children under six years old who are lead poisoned were in homes in which renovation was being done without any of the proper lead-safe work practices and careful cleanup procedures necessary to do this work.

What We've Been Doing in Massachusetts to Fight Childhood Lead Poisoning: Implementing the 1994 Lead Law Changes

- Low-risk homeowner deleading: Thousands of homeowners and their agents have taken the at-home training to perform low-risk deleading activities. This program has helped these homeowners lower deleading costs by avoiding deleaders' fees for these services.
- Encapsulation: Hundreds of homeowners and their agents have received the special training materials, including a video produced by CLPPP, and taken the exam to perform the low-risk activity of applying an encapsulant to suitable surfaces with lead hazards. At this time, CLPPP has approved seven encapsulant products.
- Tenant notification and disclosure: When the federal government followed Massachusetts' lead and put into effect requirements for lead notification and disclosure to prospective buyers and incoming tenants of pre-1978 homes, CLPPP was successful in securing federal approval of revised Massachusetts notification documents that incorporate federal requirements. This lets Massachusetts property owners and real estate agents comply with both state and federal law by using one short document.
- Interim Control: This option for property owners, providing them up to two years' compliance with the law and relief from strict liability for remedying only "urgent" lead hazards, instead of all lead hazards, has been available since 1995. In FY 1997, CLPPP sent out over 14,500 educational materials on interim control to callers who expressed interest. CLPPP has found that most owners have preferred to meet the regular deleading standard instead of interim control, however, expressing a desire to resolve the lead issues in their homes once and for all.

Summary of Private Inspections and Deleading Notifications Received by CLPPP FY1990 - FY1997

<i>Year</i>	<i>Initial Inspections</i>	<i>Units With Violations</i>	<i>Units Without Violations</i>	<i>Deleading Notifications Received by CLPPP</i>
1997	13,380	9,066	4,314	4,818
1996	16,869	11,307	5,562	4,488
1995	16,640	11,858	4,782	4,085
1994	16,313	11,182	5,131	4,028
1993	12,847	7,990	4,857	4,446
1992	15,209	9,131	6,078	4,099
1991	8,064	4,458	3,606	3,571
1990	5,363	4,140	1,223	2,513

Increased Prevention Activities

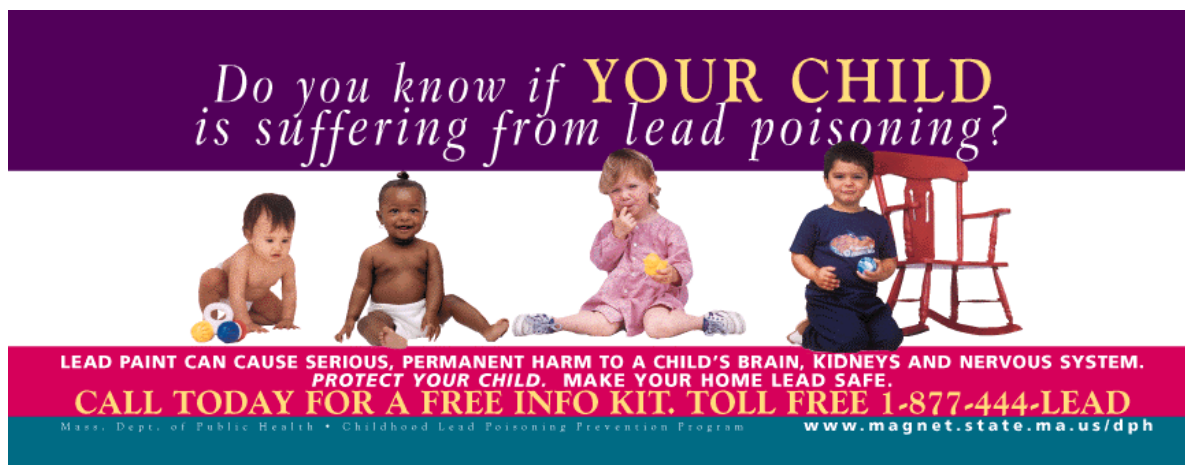
- CLPPP has been providing nursing case management, and educational services through home visits to families with children with blood lead levels of 20 mcg/dL or above since 1993. In FY 1998, CLPPP stepped up its efforts to reach families with high-risk children by funding eight community-based organizations statewide to visit the homes of families with children with blood lead levels 15-19 mcg/dL. Family lead counselors provided over 1,600 families with direct education and counseling to prevent their children's blood lead levels from going up further.
- In FY 1998, CLPPP funded 10 community-based organizations across the state to provide lead poisoning prevention education to parents, property owners, health care professionals, day care providers, real estate agents and others in their communities affected by childhood lead poisoning and the state lead law. These organizations serve the Berkshires, Boston, Brockton, Chelsea, Everett, Fall River, Fitchburg, Gardner, Haverhill, Holyoke, Lawrence, Leominster, Lowell, Malden, Medford, New Bedford, Somerville, Springfield, and Worcester.
- In 1997, CLPPP developed a first-in-the-nation lead inspector handbook for every Massachusetts lead inspector and deleader. The handbook answers questions encountered in the field and ensures a professional, standardized response to these issues.
- CLPPP has produced many new educational materials in recent years, targeting parents and property owners, to improve their ability to protect children from lead poisoning. New materials, which are available in eight languages, cover such topics as the role of good nutrition in helping protect a child from lead's effects, lead safety during pregnancy to protect children before they are born, and a guide to lead-safe home renovations.
- In FY 1998, CLPPP developed and produced an encapsulation training handbook for property owners and their agents who wish to encapsulate household surfaces with lead hazards as a method of deleading, to meet their Lead Law responsibilities.
- CLPPP's public information specialist answers calls from parents, property owners, real estate agents, physicians' offices, day care providers and a number of other members of the public on the programs information phone line. In FY 1997, over 263,500 educational materials were sent out directly by CLPPP, in response to public information requests.
- All of these educational and training materials, activities and programs are supported through the Childhood Lead Poisoning Prevention Education Trust Fund.

Increased Financial Assistance for Property Owners

- Between 1992 and 1997, \$36 million in state and federal financial assistance have been used by Massachusetts property owners for deleading. The Department of Housing and Community Development funds the Massachusetts Housing Finance Agency's deleading assistance programs. These include 0% deferred loans for owner-occupants of up to four-unit homes and 3% investor and non-profit owners loans through the *Get the Lead Out* program. In addition, the Department of Housing and Urban Development has awarded a number of significant grants to the Commonwealth and various Massachusetts cities.
- Between tax years 1992 and 1996 (the last year for which the Department of Revenue has figures), \$15.5 million in state income deleading tax credits went to over 12,000 property owners for bringing their homes into compliance with the lead law.

New Initiatives

- In February 1999, Massachusetts was awarded the second highest lead abatement assistance grant from HUD, a total of \$6.8 million. Property owners in four Massachusetts communities -- Boston, Quincy, Weymouth and the Malden area may be eligible for low-cost funding to help them bring homes housing young children into compliance with the lead law.
- CLPPP has just begun educational outreach to parents of children with blood lead levels between 10 and 14 mcg/dL. This brings CLPPP outreach to children with elevated blood lead levels in line with CDC's guidelines for lead exposures that are of concern and need attention. CLPPP mails an educational packet to each family with children in this blood lead level range.
- CLPPP is developing regulations to expand deleading activities that homeowners and their agents may do following training. These "moderate-risk" activities include the removal and replacement of leaded windows and interior and exterior woodwork. The goal is to give homeowners an additional option for lowering the costs of deleading, and ultimately provide more Massachusetts children with homes that do not pose a threat of lead poisoning.
- In November 1998, CLPPP initiated a lead poisoning prevention educational poster campaign on the Red and Orange MBTA lines, which serve the high-risk neighborhoods of Boston, Roxbury, Dorchester and Jamaica Plain, and the nearby high-risk cities of Cambridge, Somerville, and Malden. CLPPP plans to extend this campaign by running the posters on bus lines in several high risk cities throughout the state.



For more information, please contact:

Massachusetts Department of Public Health

Childhood Lead Poisoning Prevention Program

470 Atlantic Avenue, Second Floor

Boston, MA 02210-2224

1-800-532-9571 www.state.ma.us/dph/clppp